

AMERICAN FARMER.

RURAL ECONOMY, INTERNAL IMPROVEMENTS, PRICES CURRENT.

"O fortunatos nimium sua si bona norint
"Agricolos." . . . VIRG.

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AGRICULTURE.

From the London Farmer's Journal.

HOLKHAM GRAND ANNUAL Sheep Shearing Meeting, &c.

THIRD DAY.

The company assembled on Wednesday morning earlier than usual, and great numbers visited the slaughter-house, where the carcasses hung ready for inspection; their several weights will be seen below, with the premiums annexed. It is unnecessary to observe that the carcasses were fat, because the weights, which are stated in stones of 14 lbs., sufficiently show it; but we may add that they were beautifully bright, and good provers. We should recommend to the judges, in future, to add the weight in London stones of 8 lbs. at the bottom of the card, or otherwise to state it in pounds per quarter: the reason given for using the first, because it is the custom of that part, is not a sufficient one, inasmuch as the strangers, not the neighbours, stand in need of information. Mr. Coke, with his royal and noble guests, ascended his carriage about half past ten, and visited the slaughter-house; from whence the cavalcade proceeded through the Park to the farm of Mr. Thomas Moore, where the company viewed some excellent wheat on sandy soil, which was a full crop. The numerous objects in this morning's ride were highly interesting; Mr. Bloomfield's wheat crops were much admired, and it was explained that they were all sowed with four bushels to the acre. The excellence of the management in the neighbourhood of Holkham, appears in this, that the crops are *always good*; there is nothing left to chance. In other places, the seasons make great inequality of crop: and it is remarkable that, this year, there is a *less striking* difference between the crops at Holkham, and those of the countries generally which we passed through, than we ever noticed. We speak of bulk, not cleanliness; but the crops in general are cleaner this year than usual, which indeed is always the case when they are vigorous in their growth, and plentiful on the ground. The general crop of this season surpasses, in its present promise, any harvest that we have noticed since 1813.

At Mr. Bloomfield's, inoculation was not forgotten; the company viewed the several fields, which had been laid in permanent grass by this process, with great delight and satisfaction. Six years ago it was wondered at, but now it is generally understood, and as generally approved: we hesitate not to say, that for obtaining *permanent pasture*, it ought to be practised on all lands whatsoever, excepting only superior fen and marshy ground, where *sown seeds* come so vigorously. The fact, that on rich mellow land, well prepared, you may get good pasturage speedily by *sowing proper seeds*, we are not going to dispute; but the proper seeds, in quantity sufficient, will *cost more money*, which is a practical answer to all argument.

On their return, the company viewed the Ploughing Match, and then proceeded to "DINE AT HOLKHAM HALL," where between four and five hundred sat down to dinner. After the cloth was drawn, Mr. Coke rose, and before entering into the business of the day, took notice of a circumstance which, he lamented to say, had occurred that morning: a very respectable gentleman had not been able to obtain that accommodation which he (Mr. Coke) endeavoured, to the utmost of his power, to afford to every one. He was sure the company would acquit him of any intentional neglect [applause]; but such things had hap-

pened, and he was sorry for them. He then gave the health of "Lord Erskine," which was drank with great applause. His lordship rose, and in a speech which highly delighted the company, entered into a variety of interesting topics, in a strain of varied and happy eloquence. We regret that we can give but the heads of the speech; for as it is impossible to carry the *manner* with the matter, and the occasion not being of the *solemn* kind, many terms of the ludicrous were introduced, which produced extraordinary mirth. His lordship began by thanking the company for the testimonies of their approbation with which his health was drank, and alluded, in a most elegant manner, to the presence of the illustrious Prince who honoured the meeting with his countenance. His lordship then eulogized the principles, progress, and objects of the meeting, and described its reputation and effects; it brought together people from all parts of the kingdom, and from distant regions, to witness the improvements carried on. He next took a view of the essential particulars necessary to agricultural improvement: every one knew that skill, and capital, and industry, were wanting, with these joined to wisdom and liberality on the other part, great improvements had been made, and might be made, if properly applied and considered. For his part, he had acquired some capital in the former part of his life, and had attempted some agricultural improvements; but for want of skill, he had only been involved in capital mistakes; but he hoped he had not attended that meeting altogether in vain, and that some skill was yet attainable; in the mean time, he must endeavour to make up by *industry*, what was wanted in knowledge. His lordship then paid some impressive compliments to Mr. Coke, and spoke again of the bounty, and wisdom, and usefulness of his conduct. He (Lord Erskine) was of opinion, that in the great scheme of Providence, good men were raised up for the advantage of other generations of mankind—[Applauses.] He was glad to see that opinion approved, and it gained strength in his mind as well for its truth as its application; and he did not know in what way more good could be done than by the example and the benevolence of such a character. "I was once (said his lordship) in a fair way to be a farmer,—I was at least a ploughman. I ploughed such land as my hon. friend's here, or something very near it—I ploughed the sea! [Laughing.] Gentle men, there are others who have done as much, and more. I see one friend here, himself a *Hoste*—[applauses]—whose operations there will be remembered by all future generations.—[Applause.]—His lordship then adverted to the liberty of the press. He spoke of the trial by jury, as the most secure and wisest principle of civil jurisprudence that ever was conceived by man: he recapitulated the circumstances of the times when he became a barrister, when the pillars of the constitution were shaken to the centre; when the judges, who had by long usurpation taken the law into their own hands, and were accustomed to dictate to the jury the verdict they were to pronounce. The danger of this course was too obvious: the last remains of civil liberty must expire when fear or corruption fetters the minds of juries, or authority dictates their verdict. Gentlemen (said his lordship) some little merit in the case has been attributed to me: true, a sailor must fight it out, it was the nature of the beast, and no merit of mine. I fought: I conquered.—but my crew were loyal, and stood by me; and long may they so stand by the liberties of their country!—[Applauses.]—Well, now, gentlemen,

this is gone by, as to my occupation. I have got a little estate, and I am determined to improve it, that I may leave it to my descendants in full profit. I come to Holkham to take lessons, that I may find how skill improves capital, for *one* is not enough; the effect is the result of knowledge, industry, and application; and knowledge is gained by instruction and experience. We see here something like magic, but it is not done by magic, but by skill and capital, by labour, and encouragement for labour; by liberality and wisdom, such as are exercised by my noble friend here, whose example is gone forth, and its visible effects are seen in distant places;—it has improved the produce of soils and refreshed the spirits of men! I looked into his laundry and I saw the greatest of philosophers, Benjamin Franklin;—his maxims were suspended there for the admiration of youthful minds. You see now what becomes of the folly of those who either through malice or for hire, through sycophancy or ignorance, have heaped all manner of abuse upon his name, and have ranked him with the scum of the earth, where their own obscurity and obloquy may justly place them in his stead. But the nation to which he belonged knows how to esteem and honour him; and we see a 74-gun ship bearing his name, and bringing over an American ambassador." His lordship then again adverted to the subject of *free trade*, and observed, that with regard to existing circumstances, it was not only impracticable but destructive. Every country should maintain its own population; and it was the duty of every government to hold all objects as inferior to this general principle; the contrary conduct must inevitably produce ultimate mischief and misery, if not irretrievable ruin. This was rendered very clear to his lordship's mind, but when represented to the Minister, he did not think anything could be done. "But I would have it (said his lordship) well considered: it is not to convert agriculture into politics, that I mention this here; the question is not *how we got into this scrape*, but *how we are to get out of it*; how we shall bear the disease of which we are sick almost to death, or seek a remedy that may work a safe and speedy cure.—When a man is ready to die, however reluctant he might be before, he must of necessity have a physician. The Doctor comes, and considers the case, he examines the patient in order to find the seat of the complaint—"You don't look well, friend; I am afraid your liver is diseased."—"No, sir," says the patient, "that can't be, for I *lost my liver* in the Indies."—"Oh then your lungs are bad I find."—"Not so, sir," says the sick man, "they have been gone ever since the beginning of the war."—"Well, but what is the occasion then of these inflammatory symptoms? I hope the passages are clear? I would recommend a little deobstruent or diuretic."—"Good heavens, sir," says the patient, "there's nothing in my bowels!"—"Odso! (cries the Doctor) cannot you contrive to take a little exercise; if you could walk a little."—"I have not a foot to stand upon," says the patient.—"Not able to walk! But you may at least ride to gain a little strength."—"Alas! sir (says the patient) I have had the piles these ten years, and could not sit if you would give me the world." [The company were convulsed with laughter at this humorous parallel, in which every remedy that was proposed was objected to as impracticable.] "Why then, sir," says the physician, "you are in a desperate state, and you ought to have sent for an undertaker instead of me." Well, the man must go to the grave, but not the country. [Applause.] With

honesty and wisdom we may yet survive, and preserve and perpetuate our constitution and our country's prosperity; and not only so, but increase and extend the fertility, power, and happiness of the kingdom, to future generations. His lordship here again instanced the improvements at Holkham, and the mutual confidence between landlord and tenant, as producing the best consequences to individuals and to the nation. He next took a view of the senseless dispute between the contending interests of society, as if they were not all one, and inseparably united in prosperity and adversity. The times sharpened people's observation, but did not enlighten their minds; they draw forth jealousy and irritation, where they ought to produce amity and consolidate friendship. "The agriculturists are accused of wishing to pull down the manufactories (said his Lordship)—will that make bread dear? The manufacturers it seems, would ruin and starve the agriculturists;—will that make bread cheap? If I were to hear a man of education maintain such follies, I would shut him up as a worthy tenant of Bedlam.—Now the poor laws. If the money that is expended on idle people were available for the cultivation of the soil, it would put 2,400,000 acres more in corn. Would that make bread dear? But dear or cheap, if business be at a stand, and there is not money to buy, what avails it? It may be a very comfortable sight to see a poor man looking through the wrong end of a spying-glass at a cheap loaf! (*A laugh*) Well, but give an impetus to agriculture, increase production, call forth industry, and the shops are presently filled with customers, and all branches of trade are busy and prosperous. Gentlemen, these are my sentiments, and I speak them freely, both here and elsewhere. I think I have not made a political speech, but I have done my best when politically engaged to press the subject in this shape. I have not hitherto been very successful in the House to which I have the honour to belong; but the honour to be ascribed to that House for wisdom and for patriotism will depend upon their future conduct in this question; if the same course is to be pursued as heretofore, it would be better to strike my name out of it." (*Applauds*) His Lordship again spoke of the advantages of improved cultivation, and made a most elegant transition to the presence of his Royal Highness the Duke of Sussex, to whose talents, principles, and condescension he paid a high compliment. His Lordship concluded by proposing the health of Mr. Coke, and sat down amidst reiterated plaudits.

Mr. Coke then gave "Mr. Pringle," who returned thanks.

"Mr. Graham," who also returned thanks for the honour done him. He observed, that he could not but deeply reflect on the striking improvements he had witnessed, the more so, as he had a little farm in his own hands, partly for amusement, and partly for example, which he commenced upon about the time that Mr. Oakes began upon the farm which was viewed on Monday: but he should be sorry to have his farm, within the two years, submitted to such a scrutiny. He concluded by ascribing his deficiency not to want of means but to living so far from the school of Holkham.

Mr. Coke then gave, "Mr. Rush, the American Ambassador (who he regretted was not present,) and the American Gentlemen who had done him the honour to attend the meeting." Mr. Patterson returned thanks.

Mr. Coke then gave, Prince Potemkin, and Prince Trubetzkoy. (Russian Princes.) Prince Potemkin returned thanks in French. The next toast was, "Monsieur Petit," who returned thanks in English, as follows:—"Gracieuse for de bonté, vish I do feel de ver mush honneur."

Sir John Sinclair rose to inquire into two or three points regarding the ravages of the turnip fly at Holkham, and whether the crops were more liable formerly than under the present system of culture?

Mr. Coke replied, that, with the improved husbandry, they had no fear of the fly; it might be said, that they had absolutely subdued them. Formerly, they

had some crops pretty good, some middling, and some bad enough; so that it was a subject of congratulation among friends who thought they had done all that depended on them:—"You have got an excellent crop of turnips there!" Or the contrary, "Your turnips have failed in that piece."—"Yes, the land was very clean and in good order, and I have sown it three times over."—"Since Mr. Baikie came to Holkham (said Mr. Coke) the evil has been conquered: he began by sowing turnips on flat working-drills eighteen inches apart: this succeeded so well, that it was evident we might do better, and it proved an intermediate step to the ridge system. The company saw yesterday how this is executed; how the land is ridged; the manure led on and covered in; and the turnips sown on the ridges that contained. Three pints of seed are sown per acre: it falls in a good bed; the manure forces it up; it stands thickly together, and gets soon out of the way. Every body knows that sickly and weak plants suffer the soonest and the most; it may be said that they attract the fly (as lean and wasting sheep do;) but here we find the plants vigorous and plentiful, and we sow enough for the flies, and enough for the crop besides." Mr. Coke then mentioned the exertions and good conduct of Mr. Bullen, who superintended the Park farms, in terms of great commendation; and next alluded to Gypsum, and its effects on Sanfoin.—He said he owed the introduction of it to Mr. Holdich, who had been in America, and had seen it used there; at the same time, he acknowledged the receipt of several excellent books from Judge Peters, and begged Mr. Patterson to express his thanks. Gypsum had certainly been very serviceable to him, and he recommended the trial to others; he sowed it with a machine, and it might be distinguished to an inch where the machine turned. He intended this year to have left some strips unsown, but it was forgot. But even had they been so left, the crop must have been mown before it was shewn, so that the contrast could not have been witnessed by the company. It was sufficient to say, the lay produced before a little hay, but nothing good; but that now it gave full a ton more per acre. He had this year tried it on clover, but the effects were certainly not equal; there was a difference in the colour, but he thought there was none in the bulk or quantity. Mr. Coke then informed the company that Mr. Holdich had sent him last August two bushels of the seed of a grass which he (Mr. H.) called *Russell-grass*, which he had shewn to the company that morning. It was unnecessary for him (Mr. Coke) to say any thing about it, as Mr. Holdich was present, and he hoped, would give the necessary information.

To be Continued

FOR THE AMERICAN FARMER. ON THE PRESERVATION OF THE HEALTH OF NEGROES.

It is a well known fact to Physicians of the southern states, that "negroes, though less liable to autumnal diseases than the whites, yet suffer much more severely from winter epidemics than they do." The negroes, for instance, will escape the bilious affections of the hot season, while the white inhabitants are falling victims; but, when winter takes place, the blacks are swept off, while their masters families are secured.

There would be, in the extraordinary nature of the fact, a sufficient incentive to the investigation of the cause or causes of this difference: but there are motives of a still more urgent nature, that demanded an attempt at discovering the cause and preventing the effects. The blacks constitute either absolutely, or instrumentally, the wealth of our southern states. If a planter, as it often happens, is deprived by sickness, of the labour of one third, or one half of his negroes, it becomes a loss of no small magnitude.—If we should then succeed in ascertaining the cause, and pointing out a preventive, we shall not only have gratified curiosity, and served the interests of the planter, but also feel the approbation of our own mind in having aided the cause of humanity.

We have seen in our last number, "On Heat and Clothing," that *white* and *polished* surfaces let off heat *slowly*; whereas *black* or *rough* surfaces, radiate it *freely*. This is admitted as a fact in chemistry and physiology. We know that liquids cool soonest in *dark* vessels, and retain their heat longest in *bright* ones. We also know that animals in polar regions, which are of a *dark* colour in the summer, change to *white* in the winter, nature no doubt intended by the change of colour as much as by the thickening of their coat, to secure them against the severity of the cold.—The negro on the other hand, was designed for the sultry regions of the torrid zone. His surface is therefore adapted to the ready escapement of internal heat. Hence, when transplanted to colder latitudes, he and his posterity, are less capable of resisting external cold, because they are less capable of retaining their internal heat.—It is also a fact well known to physiologists, that the body of a negro is *ceteris paribus*, several degrees cooler than that of a white person. We know too, that blacks uniformly shew themselves fonder of the fire than whites.

That they are then *really* more chilly, we cannot doubt, after taking into view all the circumstances just noticed. It therefore necessarily follows, that they are more liable to diseases brought on by the cold of winter, than white persons. They are likewise more subject to disease on account of their greater exposure to wet and inclement weather.

In the enumeration of the causes of the greater liability of negroes to winter epidemics, we perceive an immediate answer to the question:—"How can the health of slaves be best preserved?" We see that if they had a *white* skin, it would prove a security to them: but as we cannot "wash the Ethiop white," we must use such other means as may prevent the free escapement of their heat.—They ought in the first place, to wear *woollens* next their skin, instead of linen and cotton. Long woollen shirts would retain their heat, equalize the excitement, and secure them against the effects of wet work and rainy weather. These shirts should be *white*, for reasons too obvious to need repetition. They should also be frequently washed, as clothing looses very much its capacity for retaining heat, when filled with perspiration, &c. The truth of this we experience every time we change our soiled clothes for clean ones; for an increased and permanent glow of heat is the consequence of putting on clean clothes. When wet, negroes should dry by a good fire. They should also be allowed to sleep by a fire, if convenient: the *out* labourers especially.

By attending to this regimen, we feel no hesitation in saying, that a planter will greatly secure the health of his slaves: and we shall conclude with remarking, that it now lies with him to determine as soon as he may see proper, whether the trouble and expense of this preventive, is rather to be chosen than the risk of losing much, by the sickness or death of his negroes.

FRANKLIN.

At a meeting of the Agricultural Society of the county of Newcastle, held at the court house in the town of Newcastle, May 1, 1820, the following persons were chosen officers for the current year, viz.—

Archibald Alexander, *President*.

Vice Presidents.

George Clark, Andrew Gray, Thomas Mendenhall.

Secretaries.

Jacob Ferriss, Samuel Meeter, Victor Dupont.

Recording Secretary—John Crow.

Committee of Correspondence.

Samuel H. Black, Anthony Higgins, Henry Steel John Merritt, John Sellars, Frederick H. Holtzbecker Benjamin Bouldin, Hugh Gemmill, Kinsey Johns, jun. John L. Morris, Thomas Rily, James Smith.

Treasurer—John Suttan.

Committee of Examiners.

John L. Morris, Henry Whitley, John D. Eves, Thomas Rily, Kinsey Johns, jun.

Extracts from the minutes,

JOHN CROW, *Rec. Sec'y*

May 1, 1820.

It gives us much pleasure to copy the following proceedings connected with the formation of an Agricultural Society in the rich, flourishing and populous county of Frederick in this state. Let the good people of that county dispute and divide about other matters as they may—we sincerely hope they will unite for the promotion of objects, about the usefulness of which, no rational mind can entertain any doubt.—Having regard to the names of those who have given their countenance to the Society in its earliest movements—we consider its prospects as highly auspicious and promising.—We suppose the chairman to be the author of an essay on the use of Plaster of Paris and the cultivation of Indian corn—which has been spoken of to the Editor, as amongst the most solid and practically useful papers contained in the pages of the American Farmer.

We offer to this Society the columns of our Journal to record their proceedings—and shall be happy by any means in the power of the Editor to promote the praise worthy objects of their association.

One little item of advice we presume to give them at present—not to rely too much on *Silk Stocking Farmers*, let their officers especially, be *active practical men*, who have the *business at heart*, and let every farmer be encouraged to communicate his experience on any particular branch of husbandry, in his own plain way. These communications ought to be in writing—but there is no occasion to deal in tropes and figures. The plain every day conversation style of the Farmer, to his neighbour is the best style on paper, for agricultural subjects, and therefore he who can tell his experience by word of mouth, can write it—or get his son or his daughter to write it, which is quite as well.—Another passing word of advice. ☞ Let the bad side of the picture be presented as well as the good.—People are too apt to boast of their casual successes, taking special care when an experiment fails, to say nothing about it. The mariner has recourse to his chart—not so much to trace the channel, as to see where the channel is not—point out the rocks and quicksands, and any land lubber may take the helm—so when the farmer prepares to make large crops, or to try some new and grand experiment, if he utterly or partially fail, he ought to tell the result, and the way and the wherefore—that others may not, go and do so likewise.

Frederick Agricultural Society.

At a respectable meeting of farmers from several districts of the county, held agreeably to public notice, at the court-house, in Frederick on Saturday the 9th of September last, Joshua Delaplane, Esq. was called to the chair, and Henry Willis appointed secretary. The following resolutions were then unanimously adopted.

1. *Resolved*, That we view agriculture as a science of the first importance, the only true basis of national prosperity and happiness; deserving in all ages the attention of the wise and of the patriotic.

2. *Resolved*, That for the improvement of agriculture and rural economy in Frederick county, a society be formed of practical farmers and all other persons disposed to assist in so laudable a purpose.

3. *Resolved*, That John M'Pherson, Henry Kemp, Joshua Delaplane, John Graham, Wm. E. Williams, John Dudderer, Jesse Slingluff, Alexander Warfield, Dennis D. Howard, Daniel James, Doct. Hilleary, Frederick Eichelberger, Samuel Ogle, David Kephart and Basil Dorsey, be and hereby are requested to serve as a committee to report a constitution for an Agricultural Society to a meeting to be held in this town on Wednesday the first day of November next.

4. *Resolved*, that the committee appointed to report a constitution, meet at Mr. Talbot's in Frederick, on Tuesday the 31st of October next.

5. *Resolved*, That the proceedings of this meeting be signed by the chairman and secretary, and published in the several newspapers of the county.

6. *Resolved*, That this meeting do now adjourn to

meet again on Wednesday the first of November next.

(Signed.) JOSH. DELAPLANE, Chairman.

HENRY WILLIS, Sec'y.

Frederick, September 9, 1820.

FOR THE AMERICAN FARMER. The Draining of Marshes.

Hampstead, 14th Oct. 1820.

MR. SKINNER,

Sir,—There is no subject connected with agriculture, which is of such importance to the salubrity and further prosperity of the sea-board of the United States, as the draining and bringing into cultivation of the Salt Marshes, Pacosons, and Swamps by which all its vast inlets, and extensive water-courses are bordered. All lands of this description, when reclaimed, have been found to be immensely productive, and literally inexhaustible under almost any system of husbandry. In many instances to the southward, particularly in South Carolina, and in many more to the northward of the Chesapeake reclamations of land, on tide water, have been made to a great extent, and with the greatest imaginable profit to the owners. But, I believe, until lately few attempts have been made to reclaim the Salt Marshes of the Chesapeake; and all of them have failed, until within two or three years past, owing to a disregard, or total inattention to the very great peculiarity of the situation and circumstances of such ground.

The Chesapeake, the grandest and safest estuary belonging to this or to any other nation including its numerous and extensive rivers, affords, perhaps, a greater extent of inland navigation, and facilitates intercourse over a finer territory than any other bay of the whole world. It is believed, there is no where to be found such prodigious tracts of Salt Marsh, as on its waters; I am satisfied there are many hundred thousand acres, which when reclaimed would be fully as productive, in Indian corn and grass as any of the first rate lands of Kentucky, or of any other country whatever; which land is, at present, not only worthless, but is actually a nuisance, poisoning the atmosphere of its neighbourhood to a considerable extent with its noxious exhalations.—In estimating the profit and advantages which are to be derived from the draining of these marshes, not only the production of such land, situated immediately upon the best navigable water of our country, is to be taken into the account, but we must also recollect the restoration of the adjacent high-lands to a state of perfect salubrity, which in many instances were scarcely habitable. This great work of reclamation has commenced; the first and principal difficulties have been overcome; and, with the condensation and clustering of the population on the eastern borders of these states, it must proceed; and will, in a few years, progress with rapid strides towards final and perfect accomplishment; when the territory washed by this "great mother of many waters," will be one of the most salubrious, abundant, and delightful regions on earth; blessed with health, plenty, and freedom.

The first thing to be ascertained, as is agreed on all hands, relative to a piece of ground which it is proposed to relieve from its incumbent waters, is the fall which, by any contrivance, can be obtained to carry off water from its surface; for, without a sufficiency of fall, it is physically impossible to drain any land; unless, indeed, as has been done in some parts of Holland, where the water is pumped out and poured into the ocean. All Salt Marshes are covered, or nearly so, by high tides; it follows, therefore, that, for the draining of such marsh, the ordinary vertical rise of the tide is all the amount of fall that can be obtained; and, consequently, that the nature of the tides, by which the marsh is visited, is the first and principal circumstance to be clearly ascertained and distinctly understood before any means of draining can be effectually applied. And yet, in most of the accounts I have seen, relative to the reclaiming of marshes, the nature of the tides are not spoken of,

or are omitted as matters too notoriously well known to be dwelt upon.

The tides of the Chesapeake, it is believed, are less than those of any other arm of the whole Atlantic ocean, certainly much less than any I have seen any account of.—The causes of this are singular, and as interesting, so far as regards the draining of marshes, to the farmer as to the navigator. I have never seen the subject any where distinctly treated of; but, on putting together, and reflecting upon all the facts, I have been able to collect, I am induced to believe, that this extraordinary circumstance is owing to that great mass of waters, the gulf stream, which rush along the whole extent of our coast. The tides, attracted by the moon have a constant tendency from east to west; and, the waters of the Atlantic, following that attraction, and meeting with the gulf stream, are checked in their progress towards the capes of the Chesapeake, and turned aside; and, thus a more than ordinary accumulation of waters are pressed on one side, over St. George's bank, and between Cape Cod and the southern extremity of Nova Scotia, against the adjacent coast and into the bay of Fundy; where the tide rises to the height of sixty feet; nearly three times as high as in any other part of the world.

And this great stream, pressing close in by Cape Hatteras, forms an eddy, or dead water between that and the Capes of Virginia, less affected by lunar attraction than any other part of our whole coast, either to the south or north of it: as is evinced by the actual observation of navigators.—Thus, at Charleston the vertical rise of the tide is six feet; at Cape Henry, and throughout the Chesapeake, it does not exceed three feet; at Cape Henlopen, or the mouth of the Delaware, it is five feet, and the same at New-York; at Cape Cod six and a half; at Boston eleven feet; at Mount Desert twelve; at Passamaquoddy twenty-five; and within the bay of Fundy from fifty to sixty feet.—And it would seem, that a similar cause, to that, which I have supposed, accumulates the tide in the bay of Fundy, operates on the bend of the coast between St. Augustine and Cape Hatteras; thus, while the tide rises no more than six feet at Charleston, the water pent up between the coast and the gulf stream, by its pressing in close to Cape Hatteras, rises seven feet at Cape Lookout, just to the southward of Hatteras. At the Island of Bermuda the tide rises five feet.—So that out side the Gulf stream, and at a short distance north, east, and south, the tide rises nearly twice as high as it does at the Capes of the Chesapeake.

There seems to have been no insurmountable obstacle in the way of reclaiming marshes on any coast where the tide has afforded a sufficient fall. To the Delaware reclaimed marshes, near Philadelphia, there is a tide fall of five feet; and to Swartwout's Meadows near New-York, there is a similar fall; and the farther north on our coast the greater the fall; and, consequently the less difficulty in draining the marsh ground. On the waters and rivers of Charleston bay, there is six feet fall of tide; and, we are assured, that the reclaimed low grounds on those waters are secure and extensive. On the coast of the famous Bedford level in England, consisting of 300,000 acres of marsh land, extending into the counties of Norfolk, Suffolk, Cambridge, Huntingdon, Northampton, and Lincoln, and so called from its having been reclaimed in the year 1649 by the Earl of Bedford, there is a tide of from twelve to fourteen feet—and on the coast of the celebrated reclaimed Romney Marsh in England, there is a tide of twenty-four feet perpendicular. In all these, and similar instances, the manner of draining marshes, where there is ample fall for carrying off the water coming from the sky, or the adjacent high-lands, has been perfectly easy, and susceptible of the clearest demonstration. But, the theory and correct principles of draining applicable to such tides, and falls, do not altogether apply to marshes washed by the low and creeping tides of the Chesapeake.

The vertical height of the ordinary tides of the Chesapeake, may be estimated at about three feet—and in effecting this rise and fall, twice in the twenty

four hours, the waters throughout the bay and its branches on an average move at the sluggish pace of about three, or not exceeding four miles in the hour. It is evident, that where the same space, in the same time is to be filled, instead of three feet perpendicular, to the height of five, six, ten, twenty, or sixty feet, the waters must move with a proportionally increased rapidity; hence, we observe the superior swiftness of the tide currents to the southward and northward of the Chesapeake, increasing in proportion to the greater rise of the tide. It seems, that in all narrow inland seas, such as the Mediterranean, and Baltic, the waters are little affected by the moon; and, consequently the tides are low; and in large Lakes, as the Caspian, and those of our country, there is no tide at all.—And it has been observed by navigators, that in all large arms of the sea, such as the Chesapeake, where the extent of the surface, covered with water, is very great in proportion to the depth, and where the lunar tides on the coast are low, the rise and fall of the waters are very much disturbed, or controlled by the winds which sweep over their surface; occasionally depressing them much below, and again elevating them greatly above the ordinary level. Hence, in my opinion, the very great irregularity of the vertical rise and fall of the tides of the Chesapeake; in consequence of which irregularity it is difficult to designate with precision the ordinary high or low water line on the shores of our bay.—And if we again advert to the effect of the Gulf stream upon the waters off the Capes, it will readily be perceived how mightily that great stream, would co-operate with a strong northerly and westerly wind, in driving out and drawing away the waters from the mouth of the Chesapeake, and how powerfully it would retard their return, or prevent the easterly winds from pushing into the bay an unusually high tide. If this notion be correct, it follows, that the tides of the Chesapeake are much oftener uncommonly low, than unusually high—which, I think, will be verified by observation; I remember well having frequently heard a low tide spoken of by persons now living in this neighbourhood, which left the Drum shoals off the mouth of Chotank Creek entirely bare; on which shoals there is commonly ten feet water—on the other hand, I have never heard of a high tide in the Potomac river rising as much as five feet above the common elevation.

Bearing in mind these particulars, relative to tides, I shall now endeavour to explain the methods of draining applicable to the Salt Marshes of the Chesapeake, as illustrated, and verified by some successful experiments made on the Potomac, particularly that of Mr. Richard Stuart, who has succeeded in draining effectually and completely about two hundred acres of Salt Marsh, which was often covered by high tides, and where formerly cat-tails or flags, square grass, and other Salt Marsh grasses only grew; and a great part of which had on it this last summer as fine a crop of Indian corn as ever grew in any part of our country.

It has been found, that the common gates, heretofore used to exclude the inundating tides of the river from such marshes, did not answer; the tide creeps in so slowly, that it would not shut such a gate in time, or press it to with sufficient firmness to exclude the flood tide; or chips, weeds, twigs, or grass were gently wafted into the gate-way, and lodged there, so as to prevent the gate from shutting quite close.—These tide gates, upon the old principle, were hung on hinges either perpendicularly or horizontally, and it was found difficult to have them kept in such exact order as to exclude a slow three feet tide.—All these and other evils, attending the old tide gates, are completely removed by the newly invented *Tide trunk*, which is perfectly and firmly closed, merely by the act of the water's rising to a given point, without the least current whatever.

The Fig. 1st. in the annexed plate, represents this *Tide-trunk*—A. B. is the trunk, open at the end A, and closed at B, with an aperture on the top at F, near the end B; the frame C, D, is attached to the trunk, and is intended to hold the iron rod E, in a

perpendicular position, which is attached at the lower end of the valve, and holds it in its place: which valve, floating, with the flowing of the tide into the trunk, at A, rises and closes the aperture F, perfectly, so soon as the water rises to the top of the trunk. Fig. 2d. represents this perpendicular iron rod, G, passing through the external frame, and the aperture at I, and attached to the valve, H, by a hook.—It must be recollected, that if this method be adopted, of retaining the valve in its proper position, under the aperture in the trunk, the iron rod must be allowed to play with perfect ease through the frame, and be so light as not to prevent the valve from floating; and if there be any apprehension of its sinking the valve, the under surface of the valve may be coated with cork to make it sufficiently buoyant to rise with the rod.—Fig. 3d. represents an interior view of the end of the trunk—1, the aperture at the top—4, the end next to the marsh closed—2, the valve lying at the bottom—and 3, two perpendicular rods passing through the trunk, and intended to confine the valve in its place, instead of the rod described in Fig. 2.—which method, of retaining the valve in its place, has its advantages, and is by some preferred to the rod. The upper surface of the valve must be smooth and made to fit closely the under surface of the top of the trunk round the aperture; the valve should be allowed to move freely in the trunk, and yet be so large as entirely to close the aperture, in whatever way it may float up to it. When the tide recedes the valve falls to the bottom, opens the aperture, at F, Fig. 1st, and the water from the marsh pours into the trunk and runs off into the river, at A, Fig. 1st.—and it has been found, on actual experiment, to exclude every drop of water from the flood tide.

But, as the water, proposed to be drained off, must flow over the top of the trunk and descend into the aperture; and as it is important, that the marsh should be drained as nearly down to low water mark as possible, it will be proper to observe, that this trunk, whatever may be its width, or depth, from 1 to 2, Fig. 1st. should not be placed, with the interior surface of the top, more than six inches above the ordinary low-water mark; because there should be room left for the water, pouring into the aperture from the marsh to clear itself over the valve, which floats on the low tide, or descends, on the tide's receding so much, to the bottom of the trunk. The height from low-water mark to the top of the trunk, being so much deducted from the depth to which the marsh can be drained by the trunk; it should, therefore, to pass the greatest quantity of water, be made broad in proportion to its depth, so as to allow of a large aperture, and be placed as low as is compatible with its object and utility.

If one trunk should not be adequate to the necessary draining, two or more may be inserted—and as the tides are very irregular, and often fall lower than common, it might be well to place one trunk lower down on a level with such uncommon low tides, so as to take advantage of the greatest degree of draining which such tides would afford.

The other figure in the annexed plate, exhibits a topographical view of Chotank creek and its vicinity. A, P, is the shore of Potomac river, from the mouth of the creek to Matompkin point; D, B, is Chotank creek flowing through the marshes. M, M, M, on its margin; J, K, is the ridge of hills, called Black Castle, immediately overlooking the creek, near its mouth, and tending away from it, so as to leave a space of level arable land between the foot of the hills, and the head of the marsh, at D, more than a mile in width; R, E, S, is a small stream, descending into the creek, and having water enough, in ordinary seasons, to turn a small mill. The margin of the marsh about this creek is designated by the lines, A, E, G, D, H, C.

That portion of this marsh, containing about two hundred acres, which has been effectually drained by Mr. Stuart, and a great part of which is now in actual cultivation, is at the upper end of the creek, designated by G, D, H, a ditch is cut round the immediate margin of the marsh along the dotted lines

from D to G, and from D to H; each of which marginal ditches is continued across the marsh into the creek—a dam is made at D, for the purpose of turning the water from above into the marginal ditches.—From G to H a dike, or mound is thrown up to exclude the tide, and a tide trunk, upon the construction I have described, is inserted at O. The marginal ditches are in this case, and should always be dug so deep as to intercept, and cut off all the springs which most generally, just there, gush out from the high-lands into the marsh—and the embankment from G to H, as well as that from the marginal ditches are raised so high as to exclude the highest spring or any extraordinary tide; and they are also sufficiently capacious to receive and carry off all the water that may pour into them from the high-lands in rainy seasons. Thus, having the tides, and the upland torrents completely relieved from all water, but that which falls from the sky, or rises from the springs immediately within it; which passes out through the tide trunk, and is the only draining it has to perform, and which it does most effectually. For the purpose of collecting these waters at the aperture of the tide trunk, small ditches are cut through the marsh, along the lowest parts of its surface, leading to the trunk. But there should be no ditch or water along the interior foot of the embankment lest it be thereby too much weakened, or the muskrats should be tempted to burrow through and occasion a leak.

The complete success of this experiment has, in the opinion of the owner, and of every one who has seen it, established, beyond question, the practicability of draining the marshes of the whole of this creek, and there is some reason to believe, that the owners of the adjacent land may be brought to agree, and that it may be entirely effected in a few years; which would bring into cultivation one or two thousand acres of land of the most inestimable fertility, and restore to perfect salubrity a tract, which now only serves to cherish clouds of mosquitoes, and to scatter its pestilent exhalations over the beautiful neighboring high-lands.

The plan proposed is, that the marginal ditch, from D to G, should be continued thence along the dotted lines to E, where a mound should be erected to turn the waters of the run, R, S, into the ditch which would thence be continued along the marsh to the river at A; a similar ditch would be continued from H to C on the river; and the tide trunk would be placed at the creek's mouth at B, and an embankment made along the river shore, from A to C, of sufficient height and strength to exclude the highest tide. It is estimated, upon apparently very reasonable grounds, that the draining of the whole marsh, might in this way, be effected with greater certainty, and, proportionably, much less expense than the reclaiming of any part of it; because, to prevent the embankment from being bored through with innumerable holes, by those indefatigable and sagacious little animals, the otters and muskrats, it must be made entirely of sandy or gravelly earth from the high-lands. The mound from G to H, was the most expensive part of the operation of draining the marsh G, H, D; and is made thus; stakes are driven down, and a wattling is made on them a foot or two high, to sustain the earth from the washing of the tide; the upper surface, or turf of the marsh is then removed near and parallel to the wattling, a few feet wide, to let the sandy earth sink into and incorporate with the marsh mud. Sandy, or gravelly earth is then carted on to this line, thus stripped of its turf, and the mound raised so high as to shut out the highest tides.

If the reclaiming of the marsh, on the one side of the creek only, were undertaken, a similar embankment must be made immediately along the water's edge; thus, suppose it was intended to reclaim the piece on the right side of this creek 1, 2, 3, 4; the embankment, such as I have described, must be carried along, or near the water's edge, designated by the dotted line, 1, 2, 3, 4; and the tide trunk be placed at the lowest and most convenient point along that line; at the same time, not neglecting in any case the marginal ditch for conducting the high land water

into the creek or river. This marsh of Chotank is in all respects, similar to all other salt marshes on the waters of the Chesapeake. Its surface is from six to twelve inches above ordinary high water mark, over a great part of it; and, hence, the fall which can be obtained to the tide trunk, may be estimated at two and a half or three feet.

After the marsh has been secured from inundation, and relieved from its incumbent waters, the next operation is to cut up the salt marsh grass, and expose it to decomposition, and the ground to be sweetened by the sun, rain, and weather. The marsh may soon be ploughed, but it is done with great labour, as the sod is very strong, thick, and tough; and the ground for want of complete exposure will be very mucky. The most effectual mode of killing the sod and grass, is to have it turned over by the hoe. After the marsh grass has been pretty well destroyed, and the earth has had some time to combine and settle, which may be effected by one summer's complete exposure, the ground may be planted in corn, which, for the first year, will be poor; but in the second and third year it will bear a prodigious crop. Immediate and continued cultivation for several years in succession is recommended as the best and most effectual mode of sweetening and preparing this kind of land for all purposes of husbandry; and Indian corn is the best preparatory crop. It is remarkable of this soil, that being wholly alluvial, and having a very great proportion of imperfectly decayed vegetable matter in its composition, it is so loose and porous in its nature, that rains falling on it sink almost immediately. From the reclaimed marsh of Mr. Stuart, which I have described, there was not a drop of water passed off, by the tide trunk, for many weeks during the last summer; the whole either sunk or evaporated; and for a while, the former bed of the creek itself became so perfectly dry as to be laid open in cracks two or three inches wide.

My observations have hitherto been confined to salt marshes exclusively; because they presented the greatest difficulties in the way of draining; such, indeed, as have been hitherto supposed to be altogether insurmountable. There are two other classes of low grounds on our rivers which are no less valuable, and are much more easily reclaimed.

On most of the shores of the rivers of the Chesapeake, between the commencement of the tide, and as low down as where the waters are brackish, and consequently where the salt marshes begin, there are extensive tracts occasionally inundated by high tides; and which are most commonly overgrown with shrubs and aquatic plants, interspersed with some few lowland forest trees. These tracts, on the Rappahannock, and I believe generally in lower Virginia, are called pacosons, a name, (perhaps Indian,) the derivation of which I have not been able to learn. Many of these pacosons have been reclaimed; and the best mode of effecting it, is that which I have described as the late mode of reclaiming salt marshes; and similar precautions must be used for excluding the tide, and the high land springs and torrents. It is of the same porous and alluvial nature as salt marsh land; inasmuch so, that I have been assured by a very respectable farmer, he could plough in his pacoson cornfield, in seasons when the highlands were too wet to work. The principal, or only difference between these two kinds of land, seems to consist in the saline impregnation of the marsh, which is not found in the pacoson soil; the consequence of which is, that the pacoson land may be cleared and put in corn the first year, so soon as it is relieved of its incumbent waters, and it will produce a fine crop; but the marsh must be left one whole season to settle and sweeten.

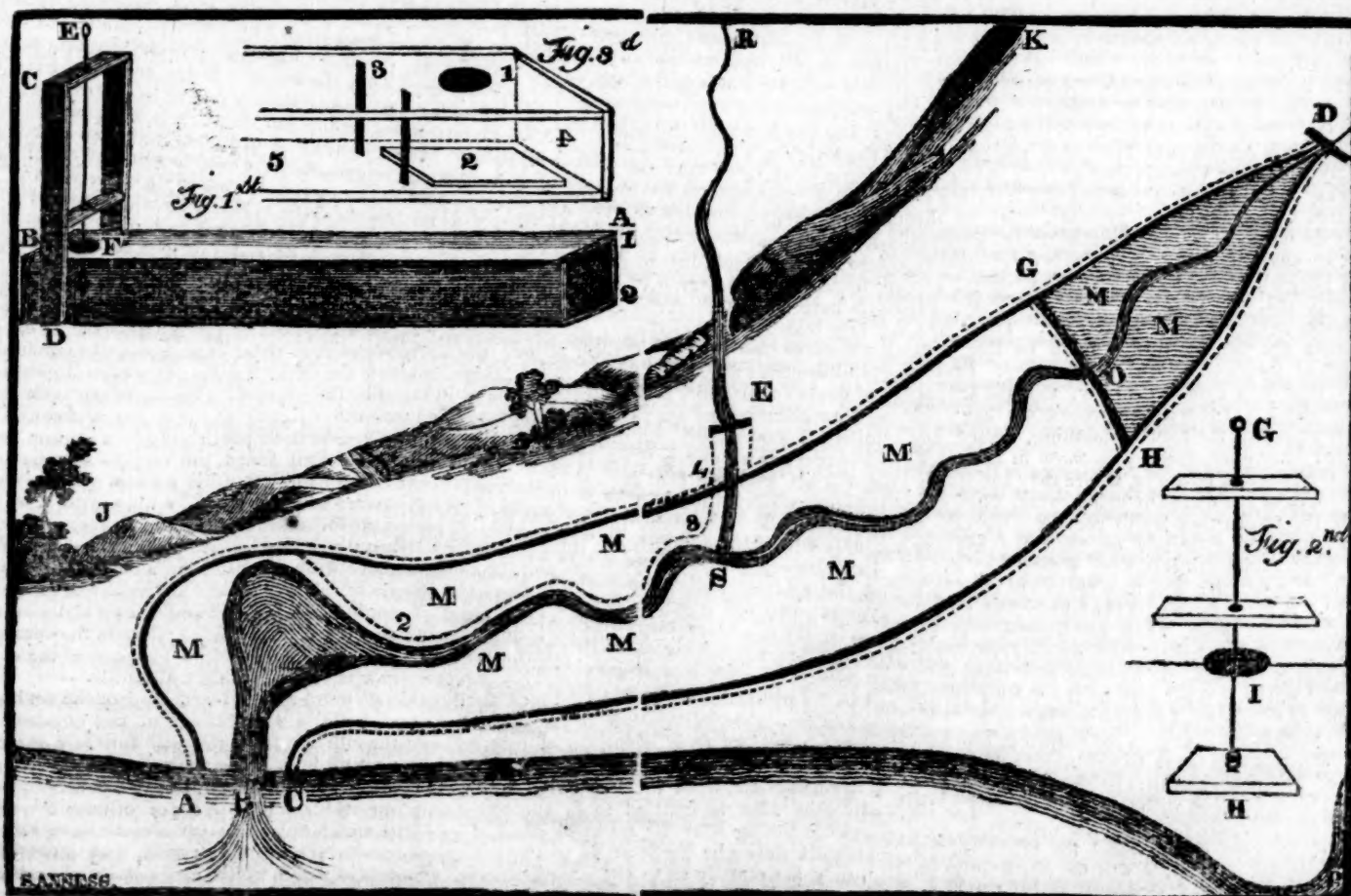
The other class of land to which I allude, is the Swamp land, to be met with on the borders of all our rivers above tide water. The only thing necessary,

effectually to drain and reclaim swamp land, is to bank out the torrents from above, and the floods and freshets from the river. As swamp lands are only visited by an annual, or at most an occasional inundation, the remedy is too obvious, easy, and indeed often practised, to need any observation or explanation. The soil of these lands, is altogether alluvial, but is more solid and compact than either salt marsh or pacoson land.

In treating of the draining of marsh and pacoson lands, I have deemed it important to pay attention to the nature of our tides; their causes, vertical rise, speed and irregularities; and I have also deemed it proper to recollect the distinction between the several classes of land to which the operation of draining have been applied, salt marsh, pacoson, river swamp, and high, but wet land. As to the last, I have offered no observations; because the draining of such lands, has been distinctly and sufficiently treated of by others.

My object, in what I have said, has been principally, to draw the attention of my countrymen to the vast importance of reclaiming our extensive tracts of salt marshes and pacosons; and to invite them to a more minute and accurate estimate of the difficulties to be encountered, and the immense advantages to be derived from such reclamations, than I have been able to make. My opinions and deductions may be, in many particulars, erroneous; but I have stated no facts relative to this subject, but what I have seen or derived from the best authority. Further experience has in store, no doubt, many great improvements in the art of draining. I may be perhaps, too much carried away by my notions on this subject, but I am impressed with a strong conviction, that it is of greater real interest to the inhabitants on the Chesapeake and its rivers, than any that has been presented to them since the first settlement of the country.

A CHOTANTER.



TO THE EDITOR OF THE AMERICAN FARMER.

[Continued from No. 30, vol. II, page 237.]

I am no friend to a general increase of the tariff; the prompt payment of duties, and a reasonable duty on sales at auction would in my opinion effect the object better. The country suffers in its revenue by the credit allowed on duties, and there can be no good reason assigned, why this credit should be continued. I know Congress continue it with a view to encourage importation, and increase the revenue by import; but the general distress of the country, and the loans, taxes or that will be required by government, for the approaching year, will it is believed, satisfy every intelligent mind that this resource has been pushed beyond any beneficial extent, and that other fiscal arrangements must be resorted to, to meet the demands on the treasury.

I have read Adam Smith, and some other writers on the subject of political economy, and they, with my own reflections on the subject, satisfy me, that a favourable balance of trade is very desirable, and has a very important bearing on the national prosperity, especially when it has no carrying trade, or other adventitious means of meeting an unfavourable balance. I am slow to give my assent to the correctness of any theory, however refined and sublime, if its results be opposed to common sense, common observation, and to the acknowledged power of numbers in arithmetical calculation. I am slow to believe that the nation can be enriched by a trade, that sells to foreign nations the entire surplus products of its labour, amounting annually to about sixty millions of dollars, and buys from foreign nations annually in products of their labour to amount of ninety millions of dollars. This trade evidently invests the whole of our disposable means in the purchase of foreign nations, and leaves the capital stock of the country mortgaged for the balance of thirty millions of dollars annually. I could as soon believe that I should be enriched by the cultivation of my farm, at an expense of nine hundred dollars per annum, when its entire produce yields no more than six hundred dollars annually.

On the injurious effects of manufacturing establishments, on the health, morals, education and future prospects of the people employed in them, as stated by the Virginia Agricultural Delegates, and supported by my friend the Virginia Farmer, it is not necessary to say much; their objections and fears are all predicated on suppositious grounds, that in this country do not exist. The manufacturing labourers are not crowded together, in a sickly unwholesome air, as alleged. The buildings are extensive, and well ventilated, the labour is light and easy, but the greater part of it requires activity. These establishments are conducted very much on the same principle as farms cultivated by freemen. On this subject, it may be sufficient to say, that the labourers generally are as free as the proprietors they work for: they provide their own cloathing, board and lodgings; they must attend punctually in the works during the hours of business, where they are subject to the orders of the owner or of his agent. They contract for the wages they are to receive generally by the week, are paid generally on Saturday evening, but in some establishments once a fortnight, and in others once a month; and they leave the employ at pleasure. A large portion of the labour is performed by children, and these, when not engaged in the works, are under the care of their parents; the owner has no charge of them, or concern with them when out of the works. What may be the future destiny of people so employed, I cannot pretend to say; but there is certainly nothing in the nature of the business, that necessarily tends to produce the dire effects predicted by the agricultural delegates. We farmers have but little concern with this business and as the increase and prosperity of these establishments, must necessarily increase the demand for our products, and promote our interest, it will be our wisdom not to stir the question of future misery and distress, that in the opinion of these gentlemen, await labourers

employed in manufacturing for the supply of our wants. A discreet recruiting officer never alarms those who surround him, by descending on the scenes of distress, carnage and destruction, to which they are exposed, who enlist to defend their country's rights. Silence, on this subject, will be our wisest course, even if the augury of these gentlemen should ultimately, in some instances, prove to be correct.—I will admit that there is much distress and misery in many of the British manufactories, as there also is in that country out of their manufactories; but numbers of these establishments are the seats of much comfort and happiness instance, Mr. Owen's of Lanark, and many others that might be mentioned.—But be the distress there what it may, it is not necessary that it should exist here; the distress and misery that attend the cultivation of many American plantations has never been experienced in the agriculture of England; this gives ground to an opinion that our factories may, and I hope will be exempt, from much of the distress and misery attendant on like establishments in that country; but the truth is that this doctrine is a manufacture of Great Britain, sent out to this country, with her other fabricks, to be disposed of for British account and benefit, and is generally retailed through the country with their other goods.

I notice that many sober minded, well judging farmers do not think so badly of the Rhode-Island petition to prohibit the importation of cotton from India, as my Virginia friend does; & really when the matter is considered the object of the petition does not appear to be altogether without reason. That country takes none of our products; we have to purchase from them for cash; this draws away our specie, and brings the cottons of that unfriendly people to our country in competition with the interest of our cotton growing states, and of our cotton manufacturers. If these goods were prohibited, the necessary quantity of like goods, would either be manufactured in the country from our own cotton, or imported from foreign countries that consume our cotton; and in either case, a portion of our population would be benefitted by the prohibition. The whole community appears to suffer by this trade; and I do not see that any are benefitted by it, except a few importers of the articles, who probably do not amount to five hundred persons in the United States. Admitting the benefit the consumers derive from the supposed cheaper purchase of these goods, yet that will not indemnify them, for the derangement the trade produces in our circulating medium, by the drain of specie from the country. We farmers of the middle states have but little interest in this subject; we do not require many of these flimsy goods: their importation conflicts with the interest of our southern agriculturists. In any view of the subject, there is a good deal of plausibility in the object of the petition, and from the respect we owe to the interest of our southern brethren and the manufacturing class, it will be our wisest course to say little on the subject. We will but promote the agricultural interest by showing a willingness to let other classes of society enjoy their full rights under the government, opposing only what is unreasonable in their pretensions.

I am sorry the Virginia Farmers should contend that the agriculturists have been burthened by the payment of import duties, to make, as he says, fortunes for the manufacturers. Nothing is more remote from the fact, and such unfounded pretensions injure our interest by rendering all we do and say in opposition to the protection claimed by the manufacturers, which in some instances has been extravagant and unreasonable, subject to a suspicion of incorrectness highly derogatory to the weight and influence which the agriculturists, from their numbers and wealth, would otherwise be entitled to in the community, where conflicting interests are to be decided on.—If the import duties be burdensome to the agriculturists, they are equally so to the manufacturers, who have to pay them in common with the agriculturists and other classes of society. The manufacturers re-

ceive no part of them, nor is any part of them applied directly or indirectly to their benefit, or in any way to promote their interest. These duties are all imposed and collected for the use of the government to enable it to meet its expenses, and no part of the public expense has arisen from our domestic manufactures. No money has ever been paid by the government for their protection, or in any way to promote their interest. How then are the agriculturists burthened by the payment of duties, to make fortunes, as the Virginia Farmer contends, for the manufacturers?—The pretension is ridiculous. A large proportion of the money accruing from the duty on import and other sources of the public revenue has been annually expended on ships of war, foreign embassies, &c. for the protection and extension of foreign commerce, and if the payment of duties is to be considered as for the benefit of any particular class of citizens, it must be for the mercantile class, who derive a direct benefit from the sums of public money annually disbursed to protect and extend foreign commerce. The agriculturists, manufacturers and labouring classes of society have but a very remote interest, if any in the protection of commerce, and may therefore with some colour of reason, consider themselves burthened by the payment of duties to meet this source of expenditure; but not so with manufacturers, for whom nothing has been disbursed, and for whose benefit no duty has been imposed. Be this as it may, the manufacturers receive no part of the duties, nor ask that any part of them should be disbursed for their benefit. But you allege that inasmuch as the duties enhance the price of imported goods, the manufacturers are thereby enabled to raise proportionably the price of their fabricks; that the manufacturers gain what the agriculturists lose by the payment of duties, and that therefore the latter are burthened by such payment to make fortunes for the former. If this argument have any merit, it recoils with equal force on the agriculturists. An import duty is paid on all agricultural products as well as on manufactured goods. This gives the agriculturists the same opportunity as the manufacturers to raise the price of their products in the amount of the duty. This duty is equally onerous with that on manufactured goods, and on some articles equally excessive and injurious to the revenue. The manufacturers consume largely of these products, and have to pay this duty, or the enhanced price resulting from the duty, and agreeably to your mode of reasoning, may say that they are burthened by the payment of import duties on agricultural products, to make fortunes for the agriculturists, who raise the price of their products in the amount of the duty imposed on those of foreign growth. This pretension however, in either case, is equally unfounded. Neither the agriculturists nor manufacturers are burthened by the payment of duties, to make fortunes for the other; each of them pay the duties for themselves, as their portion of the public expense. The whole of my friend, the Virginia Farmer's argument rests on the untenable ground that the agricultural interests is burthened by the payment of duties to make fortunes for the manufacturers, and the ground being now, as I conceive, removed, I do confidently expect from his candour a concession of the principle which will put the matter at rest between us, who ought to be united in our views and efforts that we may act with beneficial effect in the contest between the different conflicting interests of the country that now occupy the public attention.

While I applaud and respect the zeal of the Virginia Farmer in defence of our common interest in the cultivation of the soil for the comfort and support of human life, he will allow me to say that in doing this, we cannot be too careful not to trench on the rights and interests of others. There is nothing in which human nature is more liable to manifest its weakness and imperfection, than in deciding on matters in which we have, or suppose we have, an interest. The operations of our minds in such cases, cannot be too carefully watched. Without due circumspection

and care we will frequently be drawn by an honest zeal into error and disgrace. We must let the manufacturers alone; their pursuits are favourable to our interests; they consume, and enhance the price of our raw materials and provisions; they furnish a market, as far as their business extends, for many articles of our produce at our doors; they enable us beneficially to extend and diversify the objects of our cultivation and the application of our labour; they employ much of our labour that is inapplicable to agricultural pursuits; and so far as they increase the value of the raw material, by the manufacturing process; they increase the national wealth; they furnish us with necessities for the supply of our wants from the resources of the country, and as far as they go, prevent the waste of our means by purchasing from foreign nations; and their effect is to retain money in the country to the extent of the necessities they furnish, and to give steadiness of value and utility to our circulating medium; and although individuals among them, may have made extravagant claims to protection from the government, yet as a class of society, their views and wishes are governed by wisdom and discretion. They want nothing that farmers and other classes do not require; their interest suffers from the same cause that our's and every other class suffers from, and their interest will be promoted by the same means that will promote our's, and that of every other class of society. We all suffer by having relied too much on foreign countries for the support of our labour and the supply of our wants; those countries do not now require the products of our labour, to any great extent, consequently the demand has ceased and the country has become too much exhausted to supply itself comfortably with necessities from abroad. The interest of every class of society requires that the country should be brought to rely something more on its own resources for the supply of its wants and the support of its labour. It abounds in resources for our prosperity and happiness, if we could be brought to improve them more, and rely less on the fleeting, uncertain benefits of foreign commerce. Let us supply foreign nations from our industry with whatever they may require of the products of our labour, but not waste our substance by purchasing from them what neither our wants nor our comfort require. This is loudly called for by the general voice of the nation and the distresses of the country, and this is all the manufacturers ask, and it is all that is necessary to make the country prosperous and happy. Our interests are closely connected and there need be very little opposition to what will really promote the permanent interest of the manufacturing classes; our's will necessarily participate in the benefits.

I am, with high respect, for
Yourself and my brother farmer,
Yours, &c.

A MARYLAND FARMER.

To the Editor of the American Farmer.

MY DEAR SIR—

My old friend "A Correspondent," has really given me a dressing, but as I see no honour in assailing an enemy after he has refused to defend himself, I shall say no more to him after this, on the subject of Hessian fly, weavils, maggots, rats, or any thing else; although I still continue of opinion, that late sowing is the most certain way of escaping the fly. Whether it comes from the root, stem, leaf, or seed, is of little consequence to the farmer, provided he is possessed of the secret of destroying, or guarding against it, and as your last paper abundantly proves that the egg, like the egg of all other insects, is deposited in warm weather, it is reasonable to infer that, by sowing after a frost, you stand a pretty good chance of escaping its ravages. Is not warmth, let me ask, favourable to the propagation of insects of every description, and cold unfavourable thereto? How then can we believe, that an exception to this general law of nature, is made in favour of the Hessian fly?

When I am charged with firing from a "Masqued Battery" (without pleading guilty), let it be remembered that the first culverin was discharged by "A Correspondent," (God knows which) plump at the single head of "Jeremiah Simple"! What was I to do? fold my arms and let him fire away? or dash into the crowd, carry the war into the enemy's country, quarter on him, take his own arms and turn them against him. I had nothing but harmless "squibs and crackers" to let off—I had no "comet" to mount a straddle of—no great guns and blunderbusses for annoyance, and if I was awkward in the use of them, when I had won them, he ought to be the last to complain, the misfortune was mine, not his.

This sort of skirmishing would be agreeable enough though, if people would keep their tempers; but as I wish to part friends with this, as well as all the rest of your "correspondents," I will bid adieu.

Your friend and well wisher,

JEREMIAH SIMPLE.

For the American Farmer.

PALMA CHRISTI.

The Culture of the Palma Christi, or the Caster Oil Bean, is very simple. It may be planted at the distance of two feet (two may be in a hill) in rows three feet apart. It does not require what farmers call much working. To keep the plant when it is small, free from weeds, with a small flat hill round it is sufficient. A light sandy loam, is the soil most congenial to its growth and bearing, although it may be cultivated with success in almost any soil tolerably fertile. It is believed it will prosper in any climate or situation where Indian corn can be raised. I have seen but two kinds of this plant, although I believe there are many. One is much larger than the other, and requires a warmer soil and situation than the smaller kind. Both I believe possess the same medicinal properties. The only difficulty in the culture of these beans, is in the saving or gathering them—the outward coat of the bean, as it dries become elastic and flies off from the plants to a considerable distance, leaving the bean to drop on the ground. The only method that I know to prevent this, is to cut off the bunches from the plants when they are beginning to explode; to spread them on the floor of a close room; and after the bean and its shell have separated, to clean the husks from the seeds by a common wheat fan, or riddles and a draft of air. Z. HOLLINGSWORTH.

To prevent Shoes from taking in Water.

One pint of dying oil, two ounces of yellow wax, two ounces of turpentine, and half an ounce of Burgundy pitch, melted carefully over a slow fire. If new boots or shoes are rubbed with this mixture, either in the sunshine or at some distance from the fire, with a sponge or soft brush, and the operation is repeated as often as they become dry, till the leather is fully saturated, they will be impervious to wet and will wear much longer, as well as acquiring a softness and pliability, that will prevent the leather from ever shriveling.

Note—Shoes or boots prepared as above ought not to be worn till perfectly dry and elastic, otherwise their durability would rather be prevented than increased.

Genuine preparation of the famous Chemical Liquid for Boot Tops.

Many of the liquids, sold under various denominations for the purpose of cleaning and restoring the colour of Boot Tops, &c. are found very imperfectly to answer that purpose, and often to injure the leather. The following genuine receipt may be fully relied on, for actually producing this desirable effect, as well as for readily taking out grease, ink spots, and the stains occasioned by the juices of fruits, red Port Wine, &c. from all leather or parchment.

Mix in a phial, one drachm of Oxymuriate of Potash, with two ounces of distilled Water—and when the salt is dissolved, add two ounces of Muriatic acid. Then, shaking well together in another phial, three ounces of rectified Spirit of Wine, with half an ounce of the essential oil of Lemon, into the contents of the two phials, and keep the chemical liquid thus prepared closely corked for use. The Chemical liquid should be applied with a clean sponge, and dried in a gentle heat, after which, the boot tops may be polished with a proper brush, so as to appear like new leather.

THE FARMER.

BALTIMORE, FRIDAY, OCTOBER 27, 1820.

☞ To all those of our subscribers who own or reside near unreclaimed Marsh Land, we trust the communication on Draining in this paper will be found particularly acceptable, and we further trust that it will have the effect of inducing a great number to go to work, who have hitherto allowed large bodies of their most valuable land to remain worse than idle.

In saying that to a vast number of land holders, the communication of "A Chotanker," ought of itself to be worth incalculably more than the price of this paper, we must be understood as taking no credit to ourselves—all we have done is to open, as we trust, a respectable National Repository, free from sectional or local influences where all those who are willing to contribute any thing to the great interests of agriculture—may make their deposits for the general good.

We do claim to take great pleasure in the general subjects of our Journal, in our best endeavours to collect materials to make it useful, and we further claim some power to discriminate between that which is calculated to be useful in practice and that which is idle in theory. In return for zealous exertions to remunerate their past kindness—all we ask is the continued support of our friends, which they can best exert—first by giving communication of their experience in all the branches of husbandry, and next by adding to the list of our subscribers—it will take several additional names to pay for the Diagram in this paper and we have many more expensive and valuable cuts in preparation, being determined to give them whenever they are found necessary to exemplify an important topic—provided only, to use a common phrase, that we can "see our way clear."

Present Prices of Country Produce in this Market.

Actual sales of WHEAT.—RED, sold the present week for 84 cents, on Wednesday no more than 78 could be obtained for it—CORN, 38 cts—HAY, per ton, \$18—STRAW, do. \$7—FLOUR, from the wagons, \$4 25.—WHISKEY, from do. 35 cts—COTTON, Upland, 16 to 17 cts—Other articles of North Carolina produce, same as last report.

LE SAGE'S ATLAS—GREATLY IMPROVED.

M. CAREY & SON, PHILADELPHIA.

Propose to Publish in the ensuing Autumn,
The second American Edition of a complete Genealogical, Historical, Chronological and Geographical
ATLAS;

Being a general guide to history, both Ancient and Modern;
 EXHIBITING

An accurate account of the Origin, Descent, and Marriages of all the Royal Families, from the beginning of the World, to the present time;

TOGETHER WITH

The Various Possessions, Foreign Wars, Battles of Renown, and Remarkable Events, to the BATTLE OF WATERLOO, AND GENERAL PEACE OF 1815; according to the Plan of LE SAGE.

GREATLY IMPROVED.

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A Complete System of Geography and History.

BY M. LAVOISNE.

FROM THE LAST LONDON EDITION, IMPROVED,
 By C. Cross, of the University of Paris, and J. Aspin,
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CAREFULLY REVISED, AND CORRECTED.

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- 2 Chronological chart of the revolutions of all nations.
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60 Historical map of Sweden, Denmark and Norway.

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RECOMMENDATIONS OF THIS WORK.

Washington, 18th July, 1820.

DEAR SIR—In reply to your letter of this date, requesting my opinion of the general merits of "LE SAGE'S HISTORICAL ATLAS," and of the propriety of publishing in this country a correct translation of it, I take great pleasure in assuring you that I consider it the most successful effort of the age to facilitate the acquisition of historical, genealogical, chronological and geographical information.

In this admirable work, the great events, which, from the earliest ages, have changed the civil and political condition of man, and ultimately led to the existing state of human society, are not only described in strong and appropriate language, but so clearly and distinctly delineated upon maps, that the mind of the student, without an effort, comprehends, at a glance, their cause, the means employed in their accomplishment, and their remote effects. By this happy device, the senses are, in a degree unknown to any other work of the same general nature, employed in aid of the understanding and memory, and greatly advance the progress of the student.

I have, for several years, ardently wished that some enterprising individual would furnish the American youth with the means of profiting by this able work, and am happy that it has at last been undertaken by one whose talents and perseverance cannot fail to command the most complete success.

I remain, with sentiments of the highest respect, your most obedient servant,

WM. H. CRAWFORD.

The Rev. Mr. WELLS.

GENTLEMEN—I have examined "*Lavoisne's Atlas*," with care, and compared it, throughout, with the celebrated work of Le Sage, to which it is greatly superior. The number of charts is greater, by THIRTY-ONE; the price is less, by TEN or FIFTEEN DOLLARS; and the size of the book altogether more convenient. The paper, letter-press, and colouring are beautiful; and the execution, particularly of the geographical maps, is much better than that of Le Sage's, now before me. The addition of new maps and charts by the American publishers, if done with ability, will leave nothing to be desired to make it "a complete system," and a most invaluable appendage to the library of every public institution, and private gentleman in the United States.

Most respectfully yours,

D. H. BARNES, A. M.

Principal of the Classical Academy, New-York.
 New-York, 12th October, 1819.

Messrs. M. CAREY and SON.

GENTLEMEN,—I have examined, with some care, the book which you sent me, entitled "*Lavoisne's complete Genealogical, Historical, Chronological, and Geographical Atlas*." The general plan and execution of this work, so far as it extends, (being chiefly limited to the eastern continent,) are in my opinion, well calculated to answer the end proposed, namely, of "being a general guide to History, both ancient and modern." And with the corrections, and the extension of the plan to North and South America, which the editors contemplate, it must be a most valuable aid to the American student.

R. PATTERSON,

Director of the Mint, and late professor in the University of Pennsylvania.

Philadelphia, August 26, 1819.

Messrs. M. CAREY & SON.

GENTLEMEN,—I have had the pleasure of examining the work you had the goodness to send me, entitled "*Lavoisne's complete Genealogical, Historical, Chronological, and Geographical Atlas*." I am convinced by the perusal of it, that its republication in this country will materially subserve the interests of literature, form an important auxiliary to facilitate the acquisition of knowledge in the various branches comprised in its plan, and be a valuable treasure to schools, colleges, and private literary gentlemen. I wish you great success in your proposed undertaking.

Yours respectfully,

SAMUEL B. WILEY.

Philadelphia, August, 28, 1819.

Messrs. M. CAREY & SON.

GENTLEMEN.—We have examined "*Lavoisne's Historical and Geographical Atlas*," on the plan of Le Sage's celebrated Atlas, to which it has a decided superiority for the arrangement and additional matter it contains. As a guide and reference for the student or reader of history, too much cannot be said in its recommendation, and we know of no work which can supply its place in schools, colleges, or in the libraries of private gentlemen.

CARRE & SANDERSON.

Philadelphia, August 27, 1819.

Messrs. M. CAREY & SON.

TERMS.

I. The work shall be executed in the same style as the first edition.

II. Should the patronage be sufficient to warrant its republication, it shall appear in October, or November next.

III. It shall be handsomely half bound, with morocco backs and corners.

IV. The price to subscribers is \$25—to non-subscribers it will be raised to \$30. The price of the English edition is \$45.

V. Those persons who obtain subscribers for nine copies, and pay for their books, shall be entitled to a tenth gratis.